

Rev. 11/00

**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION****PATENT**

Docket No. : 51527/SAH/T539

As a below named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated below next to my name.

I believe I am the original, first and solo inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled DOPED-ABSORBER GRADED TRANSITION ENHANCED MULTIPLICATION AVALANCHE PHOTODETECTOR, the specification of which is attached hereto unless the following is checked:

X  was filed on December 12, 2003 as United States Application Number 10/735,494.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37.CFR § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States of America, listed below and have also identified below, any foreign application for patent or inventor's certificate, or any PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

<u>Application Number</u>	<u>Country</u>	<u>Filing Date (day/month/year)</u>	<u>Priority Claimed</u>
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I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>Application Number</u>	<u>Filing Date</u>
60/432,926	December 12, 2002

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

<u>Application Number</u>	<u>Filing Date</u>	<u>Patented/Pending/Abandoned</u>
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**POWER OF ATTORNEY:** I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any U.S. continuation or divisional application based on

# DECLARATION FOR PATENT APPLICATION

Docket No. 51527/SAH/T539

it, and to prosecute any international application under the Patent Cooperation Treaty based on it, and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application; or from the first or sole inventor named below in the event the application is not assigned; or from \_\_\_ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

D. Bruce Prout	(20,958)	Richard A. Wallen	(22,671)	David J. Steele	(47,317)
Richard J. Ward, Jr.	(24,187)	Michael J. MaoDermott	(29,946)	John W. Peck	(44,284)
Walter G. Maxwell	(25,355)	Anne Wang	(36,045)	Tom H. Dao	(44,641)
William P. Christie	(29,371)	Constantine Marantidis	(39,759)	Frank L. Ciro	(42,419)
David A. Dillard	(30,831)	Daniel R. Kimbell	(34,849)	Rodney V. Warfford	(51,304)
Thomas J. Daly	(32,213)	Daniel M. Cavanagh	(41,661)	Rose A. Hickman	(P-54,167)
Edward R. Schwartz	(31,135)	Gary J. Nelson	(44,257)	Colin T. Dorrian	(P-54,658)
John D. Carpenter	(34,133)	Josephine E. Chang	(46,083)	R. W. Johnston	(17,968)
Wesley W. Monroe	(39,778)	Joel A. Kauth	(41,886)	Hayden A. Carney	(22,653)
David A. Plumley	(37,208)	Patrick Y. Ikehara	(42,681)	Russell R. Palmer, Jr.	(22,994)
Gregory S. Lampert	(35,581)	Raymond R. Tabandeh	(43,945)	LeRoy T. Rahn	(20,356)
Mark Garscia	(31,953)	Cynthia A. Bonner	(44,548)	Richard D. Seibel	(22,134)
Syed A. Hasan	(41,057)	Jun-Young E. Jeon	(43,693)	Vincent G. Gioia	(19,959)
Harold E. Wurrt	(22,183)	Peter A. Nichols	(47,822)	Richard J. Paciulan	(28,248)
Robert A. Green	(28,301)	Stephen D. Burbach	(40,285)		

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

**DIRECT TELEPHONE CALLS TO:** Art Hasan, 626/795-9900

**SEND CORRESPONDENCE TO:**

Customer Number: 23363

**CHRISTIE, PARKER & HALE, LLP**

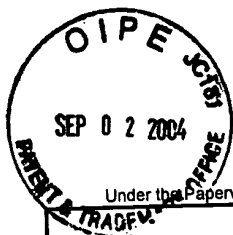
P.O. Box 7068

Pasadena, CA 91109-7068

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

<b>NAME OF SOLE OR FIRST INVENTOR</b>			
Paul Douglas Yoder			
Inventor's Signature <i>Paul D. Yoder</i>			Date 8/20/04
City Residence:	Richmond Hill	State Georgia	Country US
Citizenship US			
Mailing Address:	295 Windsong Drive, Richmond Hill, Georgia 31324		

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PTO/SB/96 (06-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: TriQuint Technology Holding Co.Application No./Patent No.: 10/735,494 Filed/Issue Date: 12/12/03Entitled: Doped-Absorber Graded Transition Enhanced Multiplication Avalanche PhotodetectorTriQuint Technology Holding Co., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.**OR**B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:1. From: Inventor To: TriQuint Technology Holding Co.The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet.☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee

August 25, 2004

Date

503-615-9000

Telephone number

Stephanie J. Welty

Typed or printed name

Signature

Vice President - Finance

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Yoder

Application No: 10/735,494

Filed: December 12, 2003

For: DOPED-ABSORBER GRADED TRANSITION  
ENHANCED MULTIPLICATION  
AVALANCHE PHOTODETECTOR

Examiner: Unknown

Art Unit: 2811

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Dear Examiner,

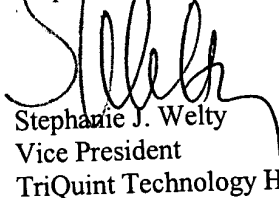
APPOINTMENT OF ASSOCIATE ATTORNEY

Please recognize the following as an associate attorney with full power to prosecute said patent application, to make alterations and amendments thereto, and to transact all business in the Patent and Trademark Office in connection therewith:

Firm Name: Joseph A. Pugh  
Reg. No. 52,137  
Address: 2300 NE Brookwood Parkway  
Hillsboro, OR 97124  
Telephone: (503)-615-9616  
Fax: (503)-615-8904

I represent the assignee of record of the entire interest in the above-referenced patent application, who is entitled to prosecute said patent application to the exclusion of the named inventors or any previous assignee pursuant to 37 CFR 3.71. A statement under 37 CFR 3.73(b) is enclosed.

Respectfully,

  
Stephanie J. Welty  
Vice President  
TriQuint Technology Holding Co.

Date: August 17, 2004

TriQuint Technology Holding Co.  
2300 NE Brookwood Parkway  
Hillsboro, OR 97124

Docket No. 51527/SAH/T539

Sole

**ASSIGNMENT**

**WHEREAS, I, PAUL DOUGLAS YODER**, residing at 295 Windsong Drive, Richmond Hill, Georgia 31324, have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled **DOPED-ABSORBER GRADED TRANSITION ENHANCED MULTIPLICATION AVALANCHE PHOTODETECTOR**, Application No. 10/735,494, filed December 12, 2003; together with claim to the priority of United States Provisional Application No. 60/432,926, filed December 12, 2002;

**AND WHEREAS TRIQUINT TECHNOLOGY HOLDING CO.**, a Delaware corporation, having a place of business at 2300 NE Brookwood Parkway, Hillsboro, Oregon 97124 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.

**NOW, THEREFORE**, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and I hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

**AND I HEREBY** covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

**AND I HEREBY** further covenant and agree that I will communicate to ASSIGNEE any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications, make all rightful oaths and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

**ASSIGNMENT**  
**Docket No. 51527/SAH/T539**

**Sole**

IN TESTIMONY WHEREOF, I hereunto set my hand this 20<sup>th</sup> day of August, 2004.

Paul D. Yoder  
Paul Douglas Yoder

STATE OF )  
COUNTY OF )

On August 20, 2004, before me Lynn M. Sexton,  
Notary Public, personally appeared **Paul Douglas Yoder** personally known to me (or proved to  
me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within  
instrument and acknowledged to me that he executed the same in his authorized capacity, and  
that by his signature on the instrument the person, or the entity upon behalf of which the person  
acted, executed the instrument.

WITNESS my hand and official seal.

Lynn M. Sexton  
Signature of Notary

Lynn M. Sexton  
Notary Public, Bryan County, Georgia  
My Commission Expires September 20, 2004

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